



# A Comprehensive *Echinacea* Germplasm Collection Located at the North Central Regional Plant Introduction Station

Joe-Ann McCoy, Mark Widrlechner, Jeff Carstens



USDA/ARS North Central Regional Plant Introduction Station,  
Iowa State University, Ames, IA 50011-1170



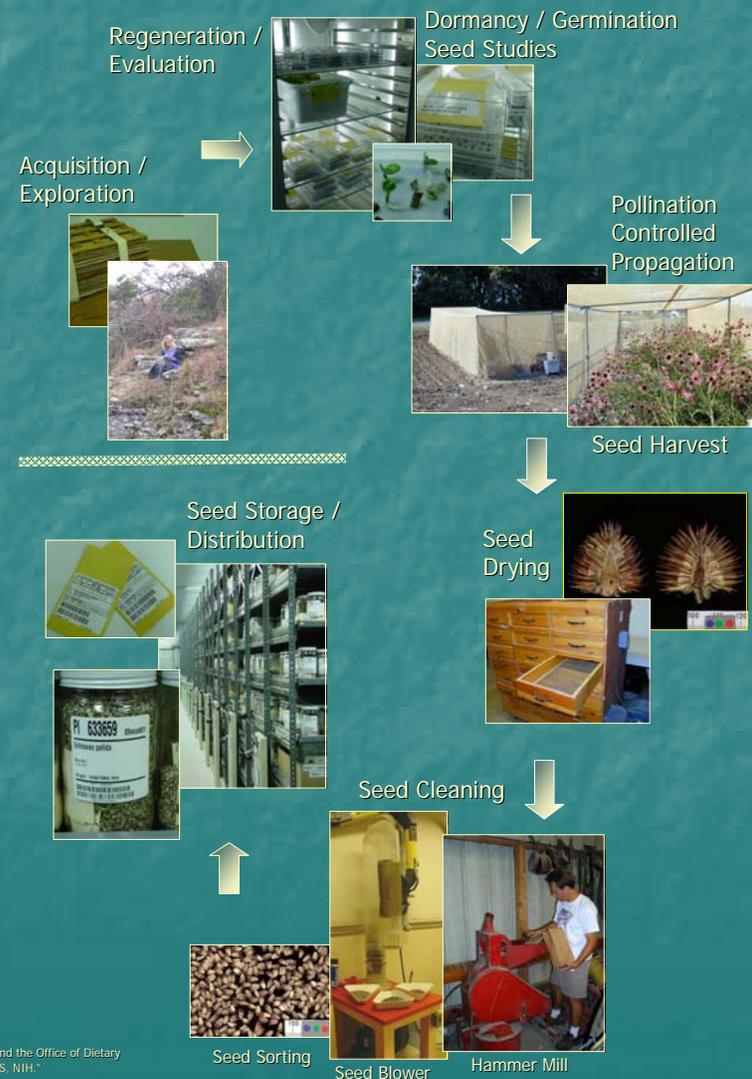
*Echinacea* is becoming a well-established, high-value crop, both as an ornamental and a dietary supplement. A comprehensive collection of *Echinacea* germplasm is conserved by the USDA-ARS North Central Regional Plant Introduction Station (NCRPIS) in Ames, Iowa and is freely available via seed distribution for research and educational purposes ([www.ars-grin.gov/npgs](http://www.ars-grin.gov/npgs)).

The mission of the North Central Regional Plant Introduction Station (NCRPIS) includes: 1.) the conservation of genetically diverse crop germplasm and associated information; 2.) conducting germplasm-related research; and 3.) encouraging the use of germplasm and associated information for research, crop improvement and product development.



<i>Echinacea</i> taxa	# of Accessions	Available Accessions
<i>E. angustifolia</i> DC.	6	5
<i>E. angustifolia</i> var. <i>angustifolia</i>	39	34
<i>E. angustifolia</i> var. <i>strigosa</i> McGregor	2	2
<i>E. atrorubens</i> Nutt.	5	5
<i>E.</i> Hybrid	2	2
* <i>E. laevigata</i> (F.E. Boynton & Beadle) S.F. Blake	10	*7
<i>E. pallida</i> (Nutt.) Nutt.	45	41
<i>E. paradoxa</i> (Norton) Britton var. <i>neglecta</i> McGregor	5	4
<i>E. paradoxa</i> var. <i>paradoxa</i>	5	5
<i>E. purpurea</i> (L.) Moench	17	10
<i>E. sanguinea</i> Nutt.	9	3
<i>E. simulata</i> McGregor	10	8
* <i>E. tennesseensis</i> (Beadle) Small	4	*4
82% of the collection is available	159	130

Representing all nine species collected throughout their respective North American geographic ranges, the *Echinacea* collection includes 159 accessions, many of which were collected by Kathleen McKeown in 1997. Extensive morphological characterization data associated with this collection have been compiled and are available to researchers on the Germplasm Resources Information Network (GRIN) database to aid in selection criteria. The collection has been used extensively for various research projects, ranging from ornamental breeding studies to HPLC analyses of metabolites of interest to the phytopharmaceutical industry.



Widrlechner, Mark P. and Kathleen A. McKeown. 2002. Assembling and characterizing a comprehensive *Echinacea* germplasm collection. pp. 506-508. Trends in New Crops and New Uses. Proceedings of the 5th National Symposium on New Crops and New Uses: Strength in Diversity, Atlanta, GA, 10-13 November 2001. J. Janick and A. Whipkey (eds.) ASHS Press, Alexandria, VA.

This publication was partially supported by grant number P01 ES012020 from the National Institute of Environmental Health Sciences (NIEHS) and the Office of Dietary Supplements (ODS), NIH "Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the NIEHS, NIH."